

Work Order ID 121014

121014

Page 1

Item ID: D4287-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Uhmw U-Channel

Stop *NS2*

Start Date: 6/16/14 Start Qty: 5.00

16/
5

Cust Item ID:

Required Date: 6/16/14 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 14-06-17

Tooling:

Date:

Run Start *NR1*

QC: Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D4287	A
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100

0.00

100

Purchasing

Memo

0.00

Purchasing

Issue P/O: 24713
Material: UHMW (white)
Supplier P#: McMaster-Carr 9928K53
Material release note required

CD 14/10/20 16

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

14/6/24 (16)

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

DAS
27
9-89

14/6/24

16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 121014

June-16-14 1:16:08 PM

121014

Page 2

Item ID: D4287-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Uhmw U-Channel
 Start Date: 6/16/14 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 6/16/14 Req'd Qty: 5.00 ***5*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location:	0.00							
130									
Packaging	Memo	0.00							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

MLJ 14-06-24
 MF
 14-6-24

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
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Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____ _____
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June-16-14 1:16:08 PM

121014

D4287-1

Required Qty: 5.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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~~5~~ 16

UHMW U-Channel

P. 14/4/24 (16)

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Material									
Operator									
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Training									
Transport									
Unapproved									

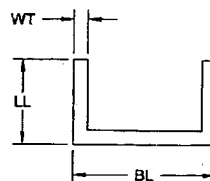
FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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SPECIFICATION CONTROL DRAWING

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 121014 MWS

1406-17



D4287-X UHMW U-CHANNEL

DART PART NUMBER	POSSIBLE SUPPLIER	SUPPLIER PART NUMBER	MATERIAL	PURCHASED LENGTH	BASE LENGTH (BL)	LEG LENGTH (LL)	WALL THICKNESS (WT)	WEIGHT (lbs)
D4287-1	McMASTER-CARR	9928K53	UHMW (WHITE)	96.0	1.05	0.75	0.250	2.11
D4287-3	McMASTER-CARR	8672K31	UHMW (WHITE)	96.0	1.25	0.75	0.125	1.29

RELEASED
2010-11-03

- NOTES:
1) MATERIAL: PURCHASE PER TABLE
OR
UHMW BLACK TIVAR 1000 VIRGIN MATERIAL
REF. DART SPEC. MUHMW
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: NONE
6) IDENTIFICATION: NONE
7) WEIGHT: PER TABLE

A	NEW ISSUE	MB	10.10.26
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.10.26		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **DSC-D4287** REV. A
SHEET 1 OF 1

TITLE **UHMW U-CHANNEL** SCALE NTS

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO24713

Purchase Order Date 6/20/2014

PO Print Date 6/20/2014

Page Number 2 of 4

VU-MCM001

Ship To: DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

MASTER-CARR SUPPLY CO,
BOX 7690
CHICAGO, IL 60680-7690
US

Contact Name

Vendor Phone

330 995 5500

Ship To Contact

Ship To Phone

Ship Via:

FedEx PI collect

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 10

USD

FCA - (Free Carrier)

Line Total:

\$26.64

4 9928K53

UHMW U-Channel

6/24/2014

Yes

6/24/2014

16.00

f

\$2.28

\$36.48

AS PER DWG D4287 REV. A
B121014

Line Total:

\$36.48

5 71725-45

6186K155 V-BELT A54

6/24/2014

Yes

6/24/2014

3.00

Each

\$11.59

\$34.77

Deliver To: LUC

6 71400-15

5758T46 FIRE
EQUIPMENT SIGN

6/24/2014

Yes

6/24/2014

3.00

Each

\$28.35

\$85.05

Line Total:

\$34.77

Note:

6/20/2014



200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO24713

Page 1 of 2

Order Placed By
Chantal Lavoie

06/20/2014

McMaster-Carr Number
5397315-01

Line	Description	Ordered	Shipped	LNS	A
1	63215K34 Stainless Steel Ball Joint Swivel Bearing, PTFE Lined, 3/8" ID, 13/16" OD, 13/32" Ball Thick Your Part Number: N/A	20 Each	20	3 - 482 - 03	07 - 38 K34 20 EA
	Unit Price: \$17.24 Extended Price: \$344.80				
2	63215K52 Stainless Steel Ball Joint Swivel Bearing, PTFE Lined, 1/4" ID, 21/32" OD, 11/32" Ball Thick Your Part Number: N/A	20 Each	20	3 - 482 - 01	08 - 56 K52 20 EA
	Unit Price: \$15.62 Extended Price: \$312.40				
3	91525A120 Type 316 Stainless Steel Large-Diameter Flat Washer, 1/4" Screw Size, 1" OD, .04"-.06" Thick, Packs of 25 Your Part Number: N/A	4 Packs	4	2 - 702	
	Unit Price: \$6.66 Extended Price: \$26.64				
4	9928K53 Impact-Resistant UHMW Polyethylene U-Channel, 1" Base X 3/4" Legs, 1/4" Thick Your Part Number: N/A	16 Feet	16	5 - 23	
	Unit Price: \$2.28 Extended Price: \$36.48				

Dart Aerospace Ltd

EXP
INV

Fr



34
8 li

FW1WBF
06/20/20
10:43/11
264
Cycle 34

